

LIPSHITS, R.U.

PINSKAYA, R.M., kandidat meditsinskikh nauk; LIPSHITS, R.U., kandidat
meditsinskikh nauk

Using substances of the adenine complex in some forms of tuberculosis.
Vrach.delo no.9:941-943 8 '52. (MLRA 10:9)

1. Kafedra tuberkuleza (zav. - prof. B.M.Zhmel'nitskiy) i kafedra
patofiziologii (zav. - prof. D.Ye.Al'para) Khar'kovskogo meditsin-
skogo instituta
(ADENINE) (TUBERCULOSIS)

LIPSHITS, R.U.

AL'PERN, D.Ye., professor; MERKULOV, I.I., professor; ZIL'BERMAN, Z.P.;
kandidat meditsinskikh nauk; LIPSHITS, R.U., kandidat meditsinskikh
nauk

Therapeutic effect of adenylic compounds on some types of inflammation
of the eye. Oft.shur. 12 no.2:67-71 '57. (MIRA 10:11)*

1. Chlen-korrespondent AMN USSR (for Al'pern). 2. Chlen-korrespondent
AMN SSSR (for Merkulov). 3. Iz ukrainskogo nauchno-issledovatel'-
skogo instituta glaznykh bolezney imeni prof. Girshmana (dir. -
chlen-korrespondent AMN SSSR prof. I.I.Merkulov).i iz kafedry
patologicheskoy fiziologii Khar'kovskogo meditsinskogo instituta
(sav. kafedroy - chlen-korrespondent AM USSR prof. D.Ye. Al'pern)
(ADENYLIC ACID) (EYE--INFLAMMATION)

AL'PERN, D.Ye., prof.; LIPSHITS, R.U., kand.med.nauk (Khar'kov)

Nucleic acids and substances of the adenyly system in the pathogenesis of inflammation. Arkh.pat. 21 no.7:3-13 '59.

(MIRA 13:5)

(NUCLEIC ACIDS chemistry)

(INFLAMMATION etiology)

(NUCLEOSIDES AND NUCLEOTIDES chemistry)

LIPSHITS, R.U. (Khar'kov)

Change in vascular permeability under the influence of adenosinetriphosphoric acid; concerning a method for determining capillary permeability by vital staining. Pat.fiziol.eksp.terap. 4 no.1:66-70 Ja-F '60. (MIRA 13:5)

1. Iz kafedry patologicheskoy fiziologii (zav. - prof. D.Ye. Al'pern) Khar'kovskogo meditsinskogo instituta.
(PERMEABILITY pharmacol.)
(ADENYLPTROPHOSPHATE pharmacol.)
(STAINS AND STAINING)

LIPSHITS, R.U.

~~XXXXXXXXXXXXXXXXXXXX~~
Influence of ademinenucleotides on cutaneous vascular permeability
in rats. Biul. eksp. i biol. med. 50 no. 8:67-70 Ag '60.

(MIRA 13:10)

1. Iz kafedry patologicheskoy fiziologii (zav. - prof. D.Ye.
Al'pern) Khar'kovskogo meditsinskogo instituta (dir. - dotsent
I.F. Kononenko). Predstavlena deystv. chlenom AMN SSSR V.V.
Parinym.

(ADENOSINETRIPHOSPHORIC ACID) (CADILLARIES—PERMEABILITY)

ALPERN, D.E.; LIPSHITS, R.U.

The effect of adenine nucleotides of vascular permeability. Cor
vasa 5 no.1:62-71 '63.

1. Department of Pathological Physiology, Kharkov Medical Institute,
Kharkov, USSR.

(CAPILLARY PERMEABILITY) (ADENINE NUCLEOTIDES)
(INFLAMMATION)

LIPSHITS, R.U.

Effect of ACTH, cortisone and somatotrophic hormone on vascular permeability and leucocyte migration under the effect of adenine nucleotides. Probl. endok. i gorm. 10 no.5:78-82 S-0 '64.

(MIRA 18:6)

1. Kafedra patologicheskoy fiziologii (zav. - chlen-korrespondent AN UkrSSR prof. D.Ye. Al'pern) Khar'kovskogo meditsinskogo instituta.

^S
LIPSHITZ, R. V., ALPERN. D.^YE. (USSR)

"Biochemical Factors in Protective-Physiological Phenomena during
Anflammation."

Report presented at the 5th Int'l. Biochemistry Congress,
Moscow, 10-16 Aug. 1961

MARKOV, Semen Markovich; LIPSHITS, S.G., red.; SAAK'YAN, Yu.A.,
red.

[Rostov-on-Don; a guidebook] Rostov-na-Donu; putevoditel'.
Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1964. 92 p.
(MIRA 17:11)

ASTAKHOV, Aleksey Matveyevich; LIPSHITS, S.G., red.

[Second youth of old plants] Vtoraiia molodost' starykh zavodov. Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1964. 19 p. (MIRA 18:7)

IVANOV, Vasilii Aleksandrovich, laureat Leninskoy premii; LIFSHITS,
S.G., red.

[On the path toward the new goals] Na puti k novym rubezham.
Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1964. 141 p.
(MIRA 18:8)

1. Predsedatel' Soveta narodnogo khozyaystva Severo-
Kavkazskogo ekonomicheskogo rayona (for Ivanov).

SUICHEZOV, Aleksandr Mikhaylovich; LIPSHITS, S.G.

[Land of the quiet Don; sketches on local geography
and history] Krai tikhogo Dona; kraevedcheskie ocherki.
Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1965. 100 p.
(MIRA 18:12)

LIPSCHITZ, SERGEI IUL'EVICH

LIPSCHITZ, SERGEI IUL'EVICH. Pochvenno-botanicheskie issledovaniia i problema sel'skogo khoziaistva v tsentral'noi chasti reki Kamchatki. Moskva, AN SSSR, 1937. 218 p. (Akademiia Nauk SSSR. Sovet po izucheniiu proizvoditel'nykh sil. Trudy. Seriia Kamchat-skala, vyp. 4)

"Istoriia issledovaniia" (includes biblio-graphies): DLG:
p. 9-24.

Q115.A4645 Vol.4.

SO: LC, Soviet Geography, Part I, 1951, Uncl.

LIPSHITZ, Sergei Iul'evich

LIPSHITZ, Sergei Iul'evich. ... Moskovskoe obshchestvo ispytatelei prirody za 135
let ego sushchestvovaniia (1805-1940) (Istoricheskii ocherk) Moskva, 1940.
131 p.

Bibliography included in "Primechania" (p. 87-131) DIC: QH301.M57L5

CtY MH NN OU

SO: LC, Soviet Geography, Part I, 1951; Uncl.

LIPSCHITZ, SERGEI IUL'EVICH.

LIPSCHITZ, SERGEI IUL'EVICH.

Russkie botaniki; biografobibliograficheskii slovar'. Otv, red, V. N. Sukachev
Moskva, Izd, Mosk. ob-va ispyt. prir., 1947

Contents. -1. A-B; -2. B-G

DLC: Z5358.R9L5

SO: LC, Soviet Geography, Part I, 1951, Uncl.

LIPSHITS, Sergey Yul'yevich

Science

Russian botanists; biographical and bibliographical dictionary Moskva, Izd-vo Moskovskogo ob-va ispytatelei prirody, 1950.

Monthly List of Russian Accessions, Library of Congress, August 1952. UNCLASSIFIED.

LIPSHITS, S. YU.

"Russian Botanists, Biographical and Bibliographic Dictionary," Vol. 2, Moscow
1947.

Bol'shaya Sovetskaya Entsiklopediya, Vol. VII, 2nd ed., Moscow, 1949, p. 493

*Cand Biol Sci, Mbr Comm on Natl Biol Sci, AS USSR, VAN '45 O-H, p. 46
Mbr. Inspection Comm, All Union. Soc., Jan 1950
Bot Zhurn, 35, 4, 1950*

LIPSHITS, S. Yu.

~~Notes on Saussurea DC.~~ Bot.mat.Gerb. 16:439-460 '54. (MIRA 8:9)
(Sawwort)

LIPSHITS, S. Yu.

~~Genus Frolovia~~ (DC) Lipsch. Bot. nat. Gerb. 16:461-462 '54.
(Sawwort) (MIRA 8:9)

LIPSHITS, S.Yu.

~~NEW SPECIES OF THE GENUS SAUSSUREA~~
New species of the genus *Saussurea*. Biol.MOIP.Otd.biol. 59 no.
6:71-84 N-D '54. (MIRA 8:2)
(Thistle)

LIPSHITS, S.Yu.

~~NEW SPECIES SAUSSUREA PUSILLA LIPSCH. FROM KASHGARIA.~~ Bot.mat.
Gerb. 17:439-440 '55. (MLRA 9:5)
(Sinkiang Province--Sawwort)

LIPSHITS, S.Yu.

Note on *Saussurea mongolica* Franch. and *Saussurea sinuata* Kom.
Bot.mat.Gerb. 17:441-442 '55. (MLBA 9:5)
(Sawwort)

L11.417.17
BOCHANTSEV, V.P.; LIPSHITS, S.Yu.

On the problem of the scope of species in higher plants. Bot.zhur.
40 no.4:542-547 J1-Ag'55. (MLRA 8:11)

1. Botanicheskiy institut imeni V.L.Komarova Akademii nauk SSSR,
Leningrad

(Botany--Classification)

LIPSHITS, S.Yu.

The 150th anniversary of the Moscow Naturalists' Society and its
role in the development of floristics, systematics, and phytogeography
Report no.1. Biol. MOIP. Otd. biol. 60 no.5:5-15 S-O '55. (MIRA 9:4)

(BOTANY--SOCIETIES)

Suppl. 11
BARANOV, P.A.; LIPSHITS, S.Yu.

N.I. Vavilov about I.V. Michurin; biographical material. *Bul. MOIP.*
Otd. biol. 60 no.5:19-20 S-O '55. (MLRA 9:4)

(MICHURIN, IVAN VLADIMIROVICH, 1855-1935)
(VAVILOV, N.I.)

LIPSHITS, S.Yu.

One-hundred and fiftieth anniversary of the Moscow Naturalists' Society and its role in the development of floristics, systematics, and phytogeography. Report No. 2. Biul.MOIP.Otd.biol. 60 no.6: 3-26 [pages 18-19, 22-23, 26 wanting] N-D '55. (MLRA 9:3)
(BOTANY--SOCIETIES)

LIPSHITS, S.Yu

GRUBOV, V.I.; MEMCHINOV, V.S., akademik, glavnyy redaktor; LAVRENKO, Ye.M.,
redaktor; SHUL'ZHENKO, I.Y., redaktor; LIPSHITS, S.Yu., redaktor;
FIVZNER, R.S., tekhnicheskiy redaktor.

Compendium of flora of the Mongolian People's Republic. Trudy
Mong. kom. no.67:3-307 '55. (MLRA 8:6)

1. Chlen-korrespondent Akademii nauk SSSR (for Lavrenko).
(Mongolia--Botany)

LAVRENKO, Ye.M., redaktor; LIPSHITS, S.Yu., redaktor; SOCHAVA, V.B.,
redaktor; SHISHKIN, B.K., redaktor; LUKICHEVA, A.N., redaktor;
YAKOVLEVVA, V.M., redaktor izdatel'stva; TYKRITINOVA, K.S.,
tekhnicheskii redaktor

[To Academician V.N.Sukachev on the 75th anniversary of his birth;
a collection of works on geobotany, silviculture, paleogeography
and floristics] Akademiku V.N.Sukachevu k 75-letiiu so dnia rozh-
deniia; sbornik rabot po geobotanike, lesovedeniiu, paleogeografii
i floristike. Moskva, Izd-vo Akademii nauk SSSR, 1956. 592 p.
(MLRA 9:10)

1. Vsesoyuznoye botanicheskoye obshchestvo.
(Sukachev, Vladimir Nikolayevich, 1880-)
(Botany)

LIPSHITS, S.Yu.

Forgotten works of A.T.Bolotov and I.A.Krasnosel'skii on
non-transmutation of plants. Bot.smur.41 no.1:115-120
Ja '56. (MIRA 9:6)

1.Botanicheskiy institut imeni V.L.Komarova Akademii nauk
SSSR, Leningrad.
(Transmutation of plants)

Lipshits, S. Yu.

Category: USSR/General Division. History. Classics. Personalities. A-2

Abs Jour: Referat Zh.-Biol., No 9, 10 May 1957, 34887

Author : Lipshits, S. Yu.

Inst : not given

Title : To the Bright Memory of Mikhail Grigoryevich Popov

Orig Pub: Botan. Zh., 1956, 41, No 5, 736-766

Abstract: A biography with an analysis of the scientific activity of the florist, taxonomist and botanical geographer Popov, who worked out a botanical-geographic conception of the ancient Mediterranean area (he proposed its division into regions), a hypothesis on the basic role of hybrid genesis in the development of the plant world, a morphological-systematic conception of the evolution of higher plants, according to which the evolutionary route of the development of angiospermae follows the scheme: wood-a type of liana or shrub- a type of perennial grass- a type of annual. Popov was the best scholar of Palearctica, particularly of Central Asia and

Card : 1/2

-15-

Category: USSR/General Division. History. Classics. Personalities. A-2

Abs Jour: Referat Zh.-Biol., No 9, 10 May 1957, 34887

Eastern Siberia; he described numerous new types of plants and published the monographs: Zygophyllum, Cicer, Eremostachys, etc. In the article are given a portrait of Popov, a complete bibliography of his works (139 titles), his notes, a list of the types of plants named after Popov, and a list of the basic regions of his botanical trips.

Card : 2/2

-16-

LIPSHITS, S.Yu.

Worthless work on plant phylogeny. Bot. zhur. 41 no. 7: 1050-1053
Jl '56. (MLA 9:10)

1. Botanicheskiy institut imeni V.L. Komarova Akademii nauk SSSR,
Leningrad.
(Phylogeny) (Angiosperae)

LIPSHITS, S.Yu.; YUNATOV, A.A.

Pavel Aleksandrovich Smirnov; on his 60th birthday. Bot.zhur.41
no.7:1072-1079 J1 '56. (MIRA 9:10)

1.Botanicheskiy institut imeni V.I.Komarova Akademii nauk SSSR.
(Smirnov, Pavel Aleksandrovich, 1896-)

BOCHANTSEV, V.P.; LIPSHITS, S.Yu.

Some Inula species of Central Asia and India. Bot. zhurn. 41 no.8:
1168-1171 Ag '56. (MLRA 9:12)

1. Botanicheskiy institut imeni V.L.Komarova Akademii nauk SSSR,
Leningrad.
(Asia--Inula)

LIPSHITS, S.Yu.; BARANOV, P.A.

Seventy-fifth birthday of Konstantin Ignat'evich Meier. Bot.zhur.
41 no.9:1389-1400 S '56. (MLRA 9:11)

1. Botanicheskiy institut imeni V.L.Komarova Akademii nauk SSSR,
Leningrad.

(Meier, Konstantin Ignat'evich, 1881-)
(Bibliography--Botany)

USSR / General Division, Dictionaries, Reference Books. Bibliographies A-9

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 180

Author : Lebedev, D.V., Lipshits, S.Yu.

Inst :: Not Given

Title : A Bibliographical Reference to "Botanicheckiy Zhurnal"

Orig Pub : Botan. zh., 1956, 41, No 12, 1737-1881

Abstract : The reference consists of four sections : 1) an alphabetical index of the materials published in "Botan zh."; 2) auxiliary index of printed works to which reviews, papers or critical discussions at meetings were devoted; 3) an auxiliary index of personalities; 4) a list of new species and genera of plants described in "Botan zh." In a table, the changes in the name of the journal, its place of publication and the composition of its editorial board are noted.

Card : 1/1

LIPSHITS, S.Yu.
BARANOV, P.A.; LIPSHITS, S.Yu.

Leningrad as the cradle of Russian botany. Bot.zhur. 42
no.6:829-833 Je '57. (MIRA 10:7)

1. Botanicheskiy institut imeni V.L. Komarova Akademii nauk SSSR,
Leningrad.
(Leningrad--Botanical research--History)

LIPSHITS, S.Yu.

~~Nikolai Ivanovich Kuznetsov.~~ Bot.zhur. 42 no.9:1307-1314 S '57.
(MLRA 10:9)

1. Botanicheskiy institut im. V.L.Komarova Akademii nauk SSSR,
Leningrad.

(Kusnetsov, Nikolai Ivanovich, 1864-1932)

LIPSHITS, S.Yu.

Concerning new species of the genus *Saussurea* from Afghanistan,
described by K.Rechinger. Bot.zhur. 43 no.3:451-453 Mr '58.
(MIRA 11:5)

1. Botanicheskiy institut im. V.L. Komarova AN SSSR, Leningrad.
(Afghanistan--Sawwort) (Rechinger, K.)

LIPSHITS, S.Yu.

Note on *Saussurea Pamintziniana* Krassn. and *Saussurea colorata*
C.Winkl. Bot.mat.Gerb. 19:387-388 '59. (MIRA 12:8)
(Panirs--Sawwart) (Tien Shan--Sawwart)

LIPSHITS, S.Yu.

Change of name of a species of the genus *Saussurea* DC. Bot.
mat.Gerb. 19:389 '59. (MIRA 12:8)
(Sawwart)

LIPSHITS, S.Yu.; BARANOV, P.A.

Nikolai Aleksandrovich Komarnitskii's seventieth birthday.
Bot. zhur. 44 no.1:138-142 Ja '59. (MIRA 12:1)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR, Leningrad.
(Komarnitskii, Nikolai Aleksandrovich, 1888-)

LEBEDEV, D.V.; LIPSHITS, S.Yu.

"List of British vascular plants" [in English] by J.E. Dandy.
Reviewed by D.V. Lebedev, S.IU. Lipshits. Bot. zhur. ⁴⁴ no.4:
578-579 Ap '59. (MIRA 12:10)

1. Botanicheskiy institut im. V.L. Komarova Akademii nauk SSSR,
Leningrad.

(Great Britain--Botany--Catalogs and collections)

LIPSHITS, S.Yu.

"International directory of specialists in plant taxonomy
with a census of their current interests" [in English] by A.C.
De Roon. Reviewed by S.IU.Lipshits. Bot.zhur. 44 no.11:
1677-1679 N '59. . (MIRA 13:4)

1. Botanicheskiy institut im. V.L.Komarova Akademii nauk SSSR,
Leningrad.

(Botanists--Directories)

(De Roon, A.C.)

SHISHKIN, B.K., glavnyy red.; BARANOV, P.A., zamestitel' glavnogo red.;
BAKHTIYEV, F.Kh., red.; SINSKAYA, Ye.N., red.; LIPSHITS, S.Yu.,
red.; LEBEDEV, D.V., red.; YAKOVLEVA, V.M., red. izd-va; SMIRNOVA,
A.V., tekhn. red.

[Problems in evolution, biogeography, genetics, and breeding;
collection of articles dedicated to the 70th anniversary of
Academician N.I. Vavilov's birth] Voprosy evoliutsii, biogeo-
grafii, genetiki i selektsii; sbornik, posviashchennyi 70-letiiu
so dnia rozhdeniia akademika N.I. Vavilova. Moskva, 1960. 335 p.
(MIRA 13:7)

1. Vsesoyuznoye botanicheskoye obshchestvo. 2. Chleny-korrespon-
denty AN SSSR (for Shishkin, Baranov).
(PLANTS, CULTIVATED) (GENETICS)

LIPSHITS, S.Yu.

Two new species of the genus *Saussurea* DC. from Central
Asia. Bot.mat.Gerb. 20:340-343 '60. (MIRA 13:7)
(Asia, Central—Sawvart)

LIPSHITS, S.Yu., LEBEDEV, D.V.

"Pavel Vasil'evich Siuzev as a naturalist" by S.F. Nikolaev. Reviewed
by S.IU. Liphits, D.V. Lebedev. Biul. MOIP. Otd. biol. 65
no. 4:137-139 J1-Ag '60. (MIRA 13:10)
(SIUZEV, PAVEL VASIL'EVICH)

LIPSHITS, S.Yu.

Note on a new Caucasian bearberry *Arctostaphylos caucasica*
Lipsch. Bot. mat. Gerb. 21:289-291 1961. (MIRA 14:10)
(Ritsa Lake region--Bearberry)

LIPSHITS, S. Yu.

Two new species of the genus *Saussurea* DC from Asia. Bot. nat.
Gerb. 21:363-368 '61. (MIRA 14:10)

(Mongolia--Sawwort)
(Kirin Province--Sawwort)

LIPSHITS, S.Yu.

Contribution to the study of the genus *Saussurea* DC in the flora
of the U.S.S.R. Bot. mat. Gerb. 21:369-381 '61. (MIRA 14:10)
(Asia--Sawwort)

GRUBOV, V.I.; VASIL'CHENKO, I.T., red.; LINCHEVSKIY, I.A., red.;
LIPSHITS, S.Yu., red.; LEBEDEV, D.V., red.

[Plants of Central Asia; according to materials of the V.L.
Komarov Botanical Institute] Rasteniia Tsentral'noi Azii;
po materialam Botanicheskogo Instituta im. V.L.Komarov.
Sost. V.I.Grubov. Moskva, Izd-vo AN SSSR. No.1. [Preface.
Ferns. Bibliography] Vvedenie. Paprotniki. Bibliografiia.
1963. 165 p. (Para 17:8)

1. Akademiya nauk SSSR. Botanicheskiy institut.

LIPSHITS, S.Yu.

Nomenclature types of species of the genus *Saussurea* preserved in the Herbarium of the Botanical Institute of the Academy of Sciences of the U.S.S.R. Report No. 1. Bot.mat.Gerb. 22:222-255 '63.

New species of the genus *Scorzonera* L. from the Herbarium of the Edinburgh Botanical Garden. Ibid.:288-301 (MIRA 17:2)

LIPSHITS, S.Yu.

Information about the genus Aucklandia Falconer(Compositae). Bot.
zhur. 49 no.1:130-132 Ja '64. (MIRA 17:2)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.

LIPSHITS, S.Yu.; LEBEDEV, D.V.

Pavel Aleksandrovich Baranov. Biul. MOIP. Otd. biol. 67 no.6:
61-67 N-D*62 (MIRA 17:7)

BORISOVA, A.G.; VASIL'YEV, V.N.; VASIL'CHENKO, I.T.; KIRPICHNIKOV, M.E.;
LEONOVA, T.G.; LIPSHITS, S.Yu.; TSVELEV, N.N.; CHEREPANOV, S.K.;
SHISHKIN, B.K. [deceased]; BOBROV, Ye.G., prof. doktor biol.nauk,
red. toma.

[Cichorioideae.] Cichorioideae. Moskva, Izd-vo Nauka, 1964. 796 p.
(Flora SSSR, vol.29) (MIRA 18:2)

LIPSHITS, S.Yu.

Nikolai Stepanovich Turchaninov (1796-1863); on the occasion
of the 100th anniversary of his death. Bot. zhur. 49 no.5:
752-766 My '64. (MIRA 17:8)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.

VAVILOV, Nikolay Ivanovich, akademik; BAKHTEYEV, F.Kh., otv. red.
toma; LIPSHITS, S.Yu., otv. red. toma

[Selected works in five volumes] Izbrannye trudy v piati
tomakh. Moskva, Nauka. Vol.5. 1965. 786 p.

(MIRA 18:11)

LIPSHITS, S.Yu.; LEBEDEV, D.V.

Fatikh Khafizovich Bakhteev; on his 60th birthday. Bot. zhur.
50 no.12:1777-1782 D '65. (MIRA 19:2)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.

FRIDRIKHSBERG, D.A.; BOL'SHAKOVA, Yu.S.; LIPSHITS, T.S.

Relation between the specific electric conductivity and the
porosity of soils. Koll.shur. 22 no.3:357-364 My-Je '60.
(MIRA 13:7)

1. Leningradskiy universitet im. A.A.Zhdanova.
(Soil research)

LIPSHITS V.V.		PROCESSING AND PROPERTIES INDEX	
CA	<p>Dehydrogenation of some organic substrates by weakened forms of <i>Clostridium welchii</i>. G. M. Pienkel, V. V. Lipshits, and M. K. Karpenko. <i>Microbiology</i> 17, 435-44 (1948). - Like <i>Streptococcus lactis</i> (facultative anaerobe), the obligative anaerobe <i>C. welchii</i> (1) retains some of its dehydrogenase activity (H) after sublethal heating (30 min. at 82°) and culturing in Kitt-Tarozzi medium. Thus treated, I was assayed for H in a phosphate-buffered medium (pH 7.7) contg. traces of Fe to activate cell metabolism. The H acceptor was an indicator such as brilliant cresyl red, methylene blue, indigo carmine, or neutral red. When the H donor was lecithin, fumaric acid, glycerol or any of several sugars H decreased, but not with ascorbic acid nor any of several amino acids. Loss of H against sugars can be restored in mediums with low oxidation reduction potential by adapting deactivated I to the medium. Julian P. Smith</p>		
<p>ASB-314 METALLURGICAL LITERATURE CLASSIFICATION</p>			

VORONKOV, M.G.; LIPSHITS, T.S.

Use of the EN-3 polyethylmethylhydrosiloxane waterproofing agent
for the emulsion water-repellent treatment of textile materials.
Zhur.prikl.khim. 36 no.1:152-156 Ja '63. (MIRA 16:5)
(Waterproofing of fibers) (Silicon organic compounds)

111 11111, 7. 7.

PA 34/49746

USSR/Medicine - Bacteria, Action
Medicine - Microbiology

Nov/Dec 48

"Dehydrogenation of Certain Organic Substrates With
Attenuated Cl. Welchii Holland," G. M. Frenkel,
V. V. Lipshits, M. K. Karmenko, Inst of Microbiol
Imeni Zabolotnyy, Acad Bot USSR, Kiev, 91 pp

"Mikrobiologiya" Vol XVII, No 6

Cells of Cl. Welchii, attenuated by heating to sub-
lethal temperature, lose their dehydrogenating
activity for carbohydrates, certain acids, and cer-
leathin. They retain it for ascorbic acid and cer-
tain amino acids. The attenuated forms may regain

34/49746

USSR/Medicine - Bacteria, Action (Contd) Nov/Dec 48

their ability to dehydrogenate certain carbohydrates
by adapting themselves to media in which hydrogen
transfer occurs readily (media with low oxidation-
reduction potential). Gives composition of culture
medium for growing cells of Cl. Welchii attenuated by
heating. Submitted 16 Jun 48.

34/49746

LIPSHITS, V. V.

25968

Vyrachivaniye na pitatyl'nykh sryelakh prograyetykh klyetok slyetok slostridi'um
welchy Holland (B. perfringens). Mnkrobnob. Zhurnal, T. XI, vyp. 2, s. 72-78, - na
ukr. ya. z. - r yezymye na Rus yaz - bnb - lnogr: 5 Nazv. 149

SO: Letopis' No. 34

LITOMITS, V. V.

"The Significance of the Oxidation-Reduction Potential of Nutrient Media for the Cultivation of Cells of *Cl. welchii* Holland (*B. perfringens*) Which Had Been Damaged by Heat", Mikrobiol Zhur, Kiev, Vol. 12, No. 1, pp 104-116, 1950.

LIPSHITS', V.V.

Studies of the anaerobic microflora of the rhizosphere of kok-saghyz. Mikro-
biol.smr.14 no.2:20-29 '52. (MLBA 6:11)

1. Z viddilu anaerobnikh mikroorganizmiv (sav.-O.M.Frenkel') Institutu mikro-
biologii im. akad. D.K.Zabolotnogo Akademii nauk USSR.
(Kok-saghyz) (Bacteria, Anaerobic)

LIPSHITS', V.V.; CHERNISHOVA, P.S.

Effect of certain soil anaerobes upon germination of seeds,
growth and productivity of higher plants. Mikrobiol.zhur.15
no.4:48-54 '53. (MLRA 7:2)

1. Z Institutu mikrobiologii Akademii nauk URSR.
(Soil microorganisms) (Clostridium)

LIPSHITS, V.V.

Properties of some anaerobes in *Clostridium*. U. M. Frenkel, V. V. Lipshits, M. K. Karpenko, and I. D. Kolchinskaya (Inst. Microbiol., Acad. Sci. U.S.S.R., Moscow). *Microbiology* 25, 423-30 (1958). -- *Polk-suzhnykh* rhizospheres yielded *Clostridium* anaerobes which form butanol on potato mash. Rye and corn mashes were less favorable, but some strains after prolonged culture on cereal mashes acquired new fermentation properties, e.g. ability to decomp. Ca lactate. In such culturing nearly all strains lost their solvent-producing capacity. The amylases of most strains were more active to potato and rye starches than to corn starch. No strain liquefied gelatin, and there was very little capacity to degrade potato or cereal proteins. Amino acids and polypeptides of potato mash were assimilated, but not those of cereal mashes. Julian P. Smith

LIPSHITS, V.V.; KOLCHINSKAYA, I.D.

Nitrogen metabolism in a new variety of *Clostridium butyricum*
Prazmowsky, producing butyl alcohol. Trudy Inst. mikrobiol.
no. 6:93-101 '59. (MIRA 13:10)

1. Institut mikrobiologii Akademii nauk USSR.
(CLOSTRIDIUM BUTYRICUM) (NITROGEN METABOLISM)

LIPSHITS, V.V. [Lipshyts', V.V.]

The need of certain sources of nitrogen and vitamin nutrition in
butylic bacteria (a new strain of Cl. butyricum Prazmowsky).
Mikrobiol. zhur. 22 no. 1:20-28 '60. (MIRA 13:10)

1. Iz Instituta mikrobiologii AN USSR.
(CLOSTRIDIUM) (NITROGEN) (VITAMINS)

LIPSHITS, V.V.; NAKHMANOVICH, B.M.; SENKEVICH, V.V.; MEL'NICHENKO, L.A.

Fermentation of pentose-hexose hydrolysates of vegetable wastes
in a mixture with molasses by butylic bacteria. Mikrobiologiya
30 no.2:323-327 Mr-Apr '61. (MIRA 14:6)

1. Institut mikrobiologii AN USSR, Kiyev i Nauchno-issledovatel's-
skaya laboratoriya Dokshukinskogo atsetonovogo zavoda.
(ACETONE) (BACTERIA)

KVASNIKOV, Ye.I. [Kvasnykov, IE.I.]; LIPSHITS, V.V. [Lipshyts', V.V.]

A conference of the Republic on the problem "Physiology and biochemistry of micro-organisms." Mikrobiol. zhur. 26 no.5:94-96 '64. (MIRA 18:7)

LIPSHITS, V.V. [Lipshyt's, V.V.]; NAGORNAYA, S.S. [Nahorna, S.S.]

Possibility of using the fluorescence microscopy method for the
differentiation of living and dead cells in anaerobic bacteria.
Mikrobiol. zhur. 26 no.3:73-76 '64. (MIRA 18:5)

1. Institut mikrobiologii AN UkrSSR.

NAKHMANOVICH, B.M.; LIPSHITS, V.V.; PAVLOVICH, L.A.

Fermentation of vegetable waste hydrolysates mixed with
molasses by *Glostridium acetobutylicum*. Prikl. biokhim. i
mikrobiol. 1 no. 6:635-639 N-D '65. (MIRA 18:12)

1. Institut mikrobiologii i virusologii AN UkrSSR. Submitted
July 11, 1965.

TRUDOVY. YG. I.

Machine Shop Practice

Repair of crankshafts., Energ. biul. no. 12, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 195²₈, Uncl.

LEWIS, E. L.

prof

14231* (Prevention of Explosions of Oil Vapors in Engine Housing). Predotvrazheniye vzyvov parov masla v karkasse dvigatelya. E. I. Linstein. Energeticheskii Biulleten', 1951, no. 3, Mar., p. 1-5.

Ventilation of housing with exhaust gases. Diagram, tables. 4 ref.

5/10/55

LIPSHTEYN, E. L.

AID P - 802

Subject : USSR/Engineering
Card 1/1 Pub. 28 - 1/7
Author : Lipshteyn, E. L.
Title : ~~RUPTURE OF A CRANK SHAFT DUE TO TORSION AND THE METHOD OF REPAIR~~
Periodical : Energ. byul., #8, 1-5, Ag 1954
Abstract : Description of the reinforcing method of repair of a broken crank shaft of a 80-hp diesel engine and computation of new stresses.
Institution : None
Submitted : No date

LIPSCHTEYN, E. L.

AID P - 1541

Subject : USSR/Engineering

Card 1/1 Pub. 28 - 1/7

Author : Lipshteyn, E. L.

Title : Repair of crankshaft of 500 HP stationary diesel engine

Periodical : Energ. byul., 1, 1-5, Ja 1955

Abstract : The author describes the technique and mathematics involved in the "transplantation" of the damaged section of a crankshaft of a 500 HP, 300 rpm, 4 cycle, 6 cylinder Ursus diesel stationary type engine. A corresponding section of crankshaft of a discarded 240 HP, 250 rpm engine built by the Danzig-Werft was milled from 205 m/m into 196 m/m in diameter to fit the Ursus crankshaft. Three diagrams and 2 tables are attached.

Institution: None

Submitted : No date

AID P - 3985

Subject : USSR/Engineering

Card 1/1 Pub. 28 - 3/11

Author : Lipshteyn, E. L.

Title : ~~Repair~~ of Cracked Crankshafts.

Periodical : Energ. byul. 12, 9-12, D 1955

Abstract : The author describes several cases of repairing crankshafts of one-cylinder diesels of 45 to 60 hp at communal electric power stations by the unique method of cutting-out the cracked spot or the fissure on the crank-pin or in the crank-arm, and then hot-patching the damaged spot, which is sometimes 170 mm long. The repaired engines, only one of them of Russian origin, have been working since 1949, and continue to give satisfactory service. Three drawings.

Institution : None

Submitted : No date

LIPSHTEYN, E.I.; MOROZOV, K.A.

Operating diesels on boiler fuel oil. Energ. biul. no. 2:25-27
F '56. (MLRA 9:5)

(Diesel fuels)

LIPSHTEYN, M.A.

Efforts to avoid warping of knit fabrics. Leg. prom. 15
no. 6:45-47 Je '55. (MIRA 8:8)
(Knit goods industry)

CA		2	
<p>The effect of detergent additives on the dispersant properties of oils. S. B. Krein, R. A. Lipshitz, and A. N. Aleksandrov. <i>Nefteprom Khim.</i> 28, No. 6, 43-50 (1948).—Lubricating oils, with and without the addn. of detergent-type agents, were tested for their dispersant power. The</p>		<p>test consisted in adding to the oil sample 0.4% by wt. of C black and detg. the pptn. time in a centrifuge. Dispersant power, in terms of pptn. time, is almost a linear function of viscosity for each oil in the absence of addn. agents. The process of pptn. of C black does not follow the Stokes law, apparently because of self-coagulation of the C black. The dispersant power of oils which differ from each other as to origin and degree of refining, when measured at the same viscosity values but different temps., is variable and depends on the presence of some natural coagulants in the oil. Residual oils as a rule have better dispersant power than distillates. An aviation oil with the addn. of 1% Co naphthenate showed a pptn. time of 530 min., compared to 60 min. for the oil alone. A smaller effect was observed with Pb naphthenate, and none at all with Zn naphthenate. Com. addn. agents of the polyfunctional type ranked as follows: (1) Santolube 110 and Lubry-Zol 738 were as good as Co naphthenate; (2) Santolube 303A, Nox, Paranox 50A, and Voltol were intermediate; and (3) additive A contg. org. derivs. of P and S as well as S derivs. of Al, etc., and the Russian additives AzNII-2 and AzNII-3 were poor. Their effect increases with higher viscosity. The response of the individual oils toward the additives, with respect to improvement in dispersant power, varies within a wide range. B. C. M.</p>	
<p>ASB-11A METALLURGICAL LITERATURE CLASSIFICATION</p>			
<p>STOW STOWAGE</p>		<p>STOW STOWAGE</p>	
<p>STOW STOWAGE</p>		<p>STOW STOWAGE</p>	

LIPSHTEYN, R. A.

"Additives Improving the Quality of Oils" (Prisadki, Uluchshayushchiye Eksploataatsionnyye Svoystva Masel), S. E. Kreyn and R. A. Lipshteyn, Gostoptekhnizdat, Moscow/Leningrad 1949, 68 pages, 3 rubles 25 kopeks.

This handbook was compiled by the office of Technical Information.

SO: Uspekhi Khimii, Vol 18, #6, 1949; Vol 19, #1, 1950 (W-10083)

LIFSHTEYN, R. A.

"Dependence of Operating Properties of Motor Oils on Their Chemical Composition and Admixtures." Sub 23 Mar 51, Central Sci Res Inst of Aviation Fuel and Oils (TsIATIM)

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

USSR/Chemical Technology. Chemical Products and Their Application -- Treatment of natural gases and petroleum. Motor fuels. Lubricants, I-13

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5588

Author: Kreyn, S. E., Lipshteyn, R. A.

Institution: None

Title: Procedure for Determination of the Oxidability of Oils in a Thin Layer at High Temperature

Original

Publication: Sb. Metody issledovaniya neftey i nefteproduktov. M., Gostoptekhzidat, 1955, 174-183

Abstract: A laboratory method has been developed for determination of the stability of oil to oxidative condensation under conditions approximating those that occur within the zone of the piston rings of internal combustion engines. A 1 gram sample of oil, in the form of a thin layer (0.4 mm), in a flat-bottom, hermetically closed, aluminum dish, is oxidized for 3 hours with a current of air (50 ml per minute), In

Card 1/2

USSR/Chemical Technology. Chemical Products and Their Application -- Treatment of natural gases and petroleum. Motor fuels. Lubricants, I-13

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5588

Abstract: the residue thus obtained are determined: oil and neutral tars, hydroxy acids and asphaltenes, carbenes and carboids. The apparatus can be used for the analysis of volatile oxidation products and also for the determination of the degree of oxidation on the basis of oxygen absorption. By means of the method that has been worked out an investigation was made of the stability to oxidative condensation of MK oil from select Surakhanskaya petroleum, and also of naphthenes (N) and aromatic hydrocarbons (AH) isolated from this oil on silica gel. It is shown that on oxidation in bulk as well as on oxidation in a thin layer the AH are considerably more stable than N, and that stability of the latter is greatly increased on addition to them of a definite amount of AH. The stability of AH is also greater than that of the oil from which they were isolated. On oxidation of N there are formed only 4.6% of asphaltenes and hydroxy acids, whereas 20% are formed on oxidation of AH. Rate of oxidation of the oil is inversely proportional to the depth of its layer. By means of experiments conducted in an atmosphere of nitrogen it is shown a thermal decomposition of oil does not take place at 250°.

Card 2/2

LIPSHTEYN, R.A.; SHTERN, Ye.N.

Causes of high dielectric losses in fresh transformer oils. Khim.i tekhn.
tepl. no.7:64-68 J1 '56. (MLBA 9:9)

1.Vsesoyuznyy teplo tekhnicheskii institut imeni Dzerzhinskogo.
(Insulating oils--Electric properties)

1131. Solubility of water in insulating oils. ¹⁵ R. A. Lapshtein
and E. N. Shtern. *Khim. i Tekh. Topliv.*, 1960, 11, 66

14. Relationship between H₂O content of oil and its
solubility in the presence of aromatic compounds and
H₂O content of the oil. The authors have found that
the solubility of H₂O in oil increases with increasing
aromaticity and decreases with increasing aromaticity.
At 20 °C and varying atm humidity using a tit. method. At
100% atm humidity H₂O content was found to be in
agreement with increasing aromaticity and decreases with
increasing aromaticity. The authors have found that
the solubility of H₂O in oil increases with increasing
aromaticity and decreases with increasing aromaticity.

PM
JME MT

LIPSHTEYN, R.A.; SHTERN, Ye.N.

Effect of the moisture on dielectric losses in liquid dielectrics.
Khim. i tekhn. topl. i masel 3 no.9:29-34 S '58. (MIRA 11:10)

1. Vsesoyuznyy teplotekhnicheskii institut.
(Dielectrics)

SOV/65-58-12-10/16

AUTHORS: Ivanov, K. I., Lipshteyn, R. A. and Mikhel'son, A. Ya.

TITLE: New Method for Evaluating the Behaviour of Transformer Oil During Normal Operation (Novyy metod otsenki povedeniya transformatornykh masel v ekspluatatsii)

PERIODICAL: Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr 12, pp 46-48 (USSR)

ABSTRACT: A method has been developed in the VTI Laboratory for determining more reliably the behaviour in operation of transformer oil, i.e. the behaviour after ageing. The method consists in ageing the oil in a specially equipped small power transformer with a tank capacity of 12 litres operating at 95°C under no-load conditions at a 100% over-voltage, i.e. with a maximum of 100% increase in the field strength with simultaneous blowing of oxygen onto the oil at a rate of 25 ml/min per 10 kg of oil. During the tests the oil was heated by the losses of the transformer itself and also by an additional 140 W immersion heater and a 1800 W hot-plate placed under the transformer. Due to the fitting of an additional tank and circulation of the oil in the zone of the field

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SOV/65-58-12-10/16

New Method for Evaluating the Behaviour of Transformer Oil
During Normal Operation

at a relatively high test temperature of $95 \pm 0.5^{\circ}\text{C}$ and saturation of the oil with oxygen, the ageing process is accelerated and lasts 750 hours, i.e. the ageing is considerably slower than in various "express" methods. The testing of the oil was effected simultaneously in two transformers in two stages. The first stage, lasting 100 hours, enables determination of the tendency of the oil to form water soluble acids during the initial stage of ageing; the second stage lasting 650 hours permits evaluating the ability of the oil to resist ageing over long periods. During the first stage, the oxygen is fed in continuously, during the second stage, the oxygen is fed in solely during the time when the transformer is actually in operation, i.e. 7 hours per day. At certain intervals samples are taken and the total acidity, the content of water soluble and volatile acids, the saponification number, the content of active oxygen and hydrogen, surface tension etc. are determined and also the loss factor and the break-down voltage. At the end of the tests the quantity of precipitate is

Card 2/3

SOV/65-58-12-10/16

New Method for Evaluating the Behaviour of Transformer Oil
During Normal Operation

also determined. Between the individual tests, the transformers are carefully cleaned by heating them twice over a long period, each time with a new portion of fresh oil. The here described method permits evaluating of the behaviour of transformer oils under conditions closely resembling normal operating conditions. During the first 100 test hours, it is possible to evaluate the ability of transformer oils to form low-molecular water soluble acids at the beginning of the ageing process and during a subsequent 650 hours it is possible to determine the behaviour of the oil under conditions of operation over long periods. Test results are given which were obtained for some Soviet oils, one of them containing 0.3% of the anti-oxidant 2,6-di-tert.butyl-4-methylphenol. There are 3 figures.

ASSOCIATION: Vsesoyuznyy teplo-tekhnicheskiy institut
(All-Union Thermo-technical Institute)

Card 3/3

LIPSHTEYN, R.A.

110-58-6-9/22

AUTHORS: Shakhnovich, M.I., Sokolova, S.L., Bessonova, Ye.I.,
Engineers and Lipshteyn, R.A., Candidate of Technical Sciences

TITLE: The Influence of Solid Insulating Materials on Transformer
Oil in the Absence of Oxygen (Vliyaniye tverdykh izolyatsion-
nykh materialov na transformatornoye maslo pri otsutstvii
kisloroda)

PERIODICAL: Vestnik Elektromyshlennosti, 1958, Nr 6,
pp 41 - 45 (USSR).

ABSTRACT: Hermetic sealing of transformers is a valuable means of
protecting the oil from oxidation provided that the sealing is
perfect. If there are slight leaks, volatile acids may accumu-
late in the transformer with inconvenient results. After these
prefatory remarks, the article considers the influence that
solid insulating materials have on oil in the absence of oxygen.
Straight mineral transformer oil to standard GOST-982-53 was
used for the tests, the oil and transformer constructional
materials being contained in sealed glass vessels. In all tests,
there was 1.5 cm² of material per 1 g oil, after the oil and
insulating materials had first been dried and de-gassed. The
tests were run at 95 °C for 1 000 hours: then determinations
were made of the neutralisation and saponification values, the
ester number, the water-soluble acids content, the dielectric-loss

Card1/4

110-88-6-9/22
The Influence of Solid Insulating Materials on Transformer Oil in
the Absence of Oxygen

angle and the refractive index.

Tests were undertaken on insulating varnishes and showed that glyptal-based varnishes could give rise to organic acids up to 0.2 mgKOH/g and water-soluble acids up to 0.1 mg KOH/g. As this effect is not observed when tests are made with exposure to air, it is supposed that some of the acids derived from glyptal-based varnishes are volatile. This is very important because low-molecular-weight acids can be dangerous. Bakelite resins have little influence on the oil beyond increasing the power factor somewhat but, in this respect, none of the varnishes acted dangerously. The test results given in Table 3 show that in the absence of oxygen, copper has no deleterious effect on the oil; also, if the copper is protected from contact with the oil by varnish, then the varnish is more likely to damage the oil than is the copper. This, too, is not observed in tests with exposure to atmosphere. Iron insulated with paper has less effect on the oil than iron insulated by varnish, which is again the opposite of what is observed when there is access to air during the tests.

Card2/4

110-58-6-9/22

The Influence of Solid Insulating Materials on Transformer Oil in the Absence of Oxygen

Most types of solid insulation had little effect on the chemical properties of the oil but varnished cloth caused an increase in the neutralisation value and particularly in the content of low-molecular-weight acids. Oil-resistance rubber increased the power factor of the oil and a white deposit was formed that contained zinc and presumably resulted from decomposition of the rubber. The rubber itself did not swell by more than 10%, which is the limiting value in the appropriate standard and as it obviously had a deleterious effect on the oil, it follows that the standard is inadequate. Bakelised paper tubes increased the power factor of the oil, presumably because the bakelite varnish was not thoroughly polymerised, for the varnish alone had no such effect.

Card 3/4

110-58-6-9/22

The Influence of Solid Insulating Materials on Transformer Oil in
the Absence of Oxygen

There are 4 tables and 4 references, 3 of which are Soviet
and 1 English.

ASSOCIATION: Moskovskiy transformatornyy zavod (Moscow Transformer
Works) and VTI

SUBMITTED: December 9, 1957

Card 4/4 1. Oils--Insulations 2. Transformers--Materials

AUTHORS: Lipshteyn, R. A. and Shtern, Ye. N. SOV/65-58-9-6/16

TITLE: Influence of Humidity on the Dielectric Losses in Liquid Dielectrics (Vliyaniye vlagi na dielektricheskiye poteri v zhidkikh dielektrikakh)

PERIODICAL: Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr 9, pp 29-34 (USSR)

ABSTRACT: The electric strength and the loss factor of liquid dielectrics is influenced to a considerable extent by humidity. Many published results of previous investigations are only of a qualitative character. In this paper results are given of investigations of the influence of the concentration and the state of the water on the loss factor of transformer oil with and without the presence of polar substances. The problem of solubility of humidity in oils and the relations governing this phenomenon were dealt with in an earlier paper of the authors (Ref 4). The loss factor of the oil was determined by means of a bridge using a 50 c.p.s. current supply and a field strength of 1 kV/mm under conditions specified by standard specifications using plane electrodes (with quartz plates) which were placed into a hermetically

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SOV/65-58-9-6/16

. Influence of Humidity on the Dielectric Losses in Liquid Dielectrics

sealed metallic housing. The desired air humidity inside that housing was ensured by means of an aqueous solution of NaOH of a definite concentration. The housing was placed into an air thermostat maintaining the necessary temperature, which was measured in the oil by means of a thermocouple. All the leads were inside quartz tubes. The oil samples were prepared by filtering under vacuum through a Nr 4 glass Shott filter and placing them in a desiccator for two days at room temperature. Thus, the humidity content of the air was 0.000% and its electric strength was above 240 kV/cm. The sample was kept in the housing at zero or high air humidity for 20 hours at room temperature and for a further 5 hours at a higher temperature. After determining the loss factor, the electrode was quickly removed and the water content of the oil determined by the calcium hydride method. The results are entered in Table 1. Within the limits of experimental error, even large amounts of dissolved water did not bring about an increase in the dielectric losses of the oil at elevated temperatures; at 70°C the tg δ of the water-free samples

Card 2/4

SOV/65-58-9-6/16

Influence of Humidity on the Dielectric Losses in Liquid Dielectrics

and samples containing about 0.04% of water equalled respectively 1.40 and 1.41%. In oil which was preliminarily dried no change was observed in the tg δ value after exposure to air of a high relative humidity (up to 90%), since the water absorbed from the air forms with the oil a true solution, Figs. 1 and 2. It was found that the equilibrium of water in the oil at a given temperature depends on the corresponding air humidity. The authors found that the dielectric losses in the oil caused by the presence of water do not depend on the water content but on its condition. Water forming a true solution does not affect substantially the loss factor but if it is not dissolved in the oil it causes a sharp increase in the dielectric losses. For a given oil at a given temperature and air humidity, the loss factor increases sharply above a certain limit concentration of the water. The dielectric losses in the oil can be explained by cataphoretic conductivity rather than by ionic conductivity. Additional experiments were carried out to confirm this hypothesis; the desiccated oil was placed for two days into a hermetically sealed container inside which the air humidity equalled 90%.

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SOV/65-68-9-6/16

Influence of Humidity on the Dielectric Losses in Liquid Dielectrics

During this time the value of the loss factor did not change. After unsealing this container, the air humidity dropped rapidly from 90 to 40% and there was a slight increase in the value of $\text{tg } \delta$. The measured values of $\text{tg } \delta$ as a function of the content of humidity for oils with polar substances as a function of the water content are entered in Table 2; in oils containing such polar substances as acetic acid, butyric acid, lead and barium naphthenates, $\text{tg } \delta$ changes only very slightly except for oils containing 0.5% sodium naphthenate for which it increases from 0.64 to 7.00% after 4 days. According to earlier work (Ref 4) some polar substances impart the property of self-emulsification to the oil. The authors conclude that with polar substances present, the water can bring about an increase in the $\text{tg } \delta$ value only if it is not dissolved in oil, i.e. in the case of "self-emulsification". There are 2 tables, 2 figures and 4 Soviet references.

ASSOCIATION: Vsesoyuznyy teplotekhnicheskiy in-t (All-Union Power Engineering Institute)

Card 4/4

1. Liquids--Dielectric properties
2. Dielectric properties--Moisture factors

SOV/110-59-5-10/25

AUTHORS: Shakhnovich, M.I., Engineer and
Lipshteyn, R.A., Candidate of Technical Sciences

TITLE: The Adsorption of Certain Transformer-Oil Oxidation
Products by Solid Insulating Materials (Adsorbtsiya
nekotorykh produktov okisleniya transformatornogo masla
tverdymi izolyatsionnymi materialami)

PERIODICAL: Vestnik elektromyshlennosti, 1959, Nr 5, pp 38-40 (USSR)

ABSTRACT: The influence of oil oxidation products on the deterioration of solid insulation immersed in the oil is not yet fully understood. It was, therefore, decided to study the influence of individual oil oxidation products on fibrous insulation. This article describes investigations on cable-papers and electrical pressboards immersed in transformer oil to find their adsorption of the organic acids and naphthenates dissolved in the oil. The oxidation products were selected for their ability to attack fibrous insulation. They were: acetic, stearic and oleic acids, naphthenic acids of transformer oil distillate and copper and iron naphthenates produced from these acids. The insulating materials were cable-paper to standard GOST 645-41 and electrical pressboard to

Card 1/3